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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/975,593	10/10/2001	Mark S. Crowder	3123-379	8756

22442 7590 10/06/2003

SHERIDAN ROSS PC
1560 BROADWAY
SUITE 1200
DENVER, CO 80202

EXAMINER

KIM, PAUL D

ART UNIT PAPER NUMBER

3729

DATE MAILED: 10/06/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

18

Office Action Summary	Application No.	Applicant(s)	
	09/975,593	CROWDER ET AL.	
	Examiner	Art Unit	
	Paul D Kim	3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-29 and 31 is/are pending in the application.
- 4a) Of the above claim(s) 22-29 and 31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is a response to the amendment filed on 7/15/2003.

Response to the Restriction Requirement

2. Applicant's election with traverse of Group III, claims 13-21, in Paper No. 9 is acknowledged. The traversal is on the ground(s) that the amended claim 22 can be a linking claim and the restriction should be withdrawn. This is not found persuasive. Even though applicant amended the claim 22 to delete the limitation of applying a lubricant film inner surface of the swage, the combination of Group I (claims 13-21) does not require swage contact surfaces and the lubricant film provides a subsequent de-swaging process as recited in claim 22.

The requirement is still deemed proper and is therefore made FINAL.

3. Claims 22-29 and a newly submitted claim 31 should be withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 8.

4. This application contains claim 22-29 and 31 drawn to an invention nonelected with traverse in Paper No. 8. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 13-15 and 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chung et al. (US PAT. 5,879,578).

Chung et al. teach a method of assembling a disk drive comprising steps of: providing an actuator arm (146) having a proximal end and a distal end; providing a suspension arm (144) having a proximal end and a distal end; fixing a swage plate (160) including a swage boss (162) to the proximal end of the suspension arm as shown in Fig. 4 and 5; applying a lubricant to a swage ball; and attaching the suspension arm and actuator arm by swaging the swage boss (col. 1, line 54 to col. 2, line 45 and col. 4, lines 11-67).

As per claim 15 Chung et al. teach a process of applying the lubricant by immersing the swage ball into a dilute solution containing the lubricant as disclosed in col. 4, lines 39-53.

However, Chung et al. do not teach a process of depositing a film lubricant upon at least outer surface of the swage boss. Even though Chung et al. teach the process of applying the lubricant to the swage ball as set forth above in claim 13, the lubricant is also being applied to the swage boss from the lubricated swage ball when the lubricated swage ball is placed in the swage boss. Therefore, it would have been obvious to a

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person having ordinary skill in the art at the time the invention was made to modify a facilitating process of applying a lubricant to the swage ball by placing the lubricated swage ball in the swage boss to lubricate the swage boss of Chung et al. for the purpose of reducing the force friction or wearing either the swage ball or swage boss or both during a production operation.

As per claims 18-21 Chung et al. also teach that the lubricant is a fluorocarbon. Although Chung et al. does not disclose expressly characteristics of the lubricant such as a polymer film, it would have been an obvious matter of design choice to a person of ordinary skill in the art to modify the lubricant as recited in the claim because applicant has not disclosed that the polymer film is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected applicant's invention to perform equally well with the fluorocarbon to reduce a friction. Therefore, it would have been an obvious matter of design choice to modify the lubricant of the fluorocarbon to obtain the invention as specified in claims 18-21.

7. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chung et al. in view of Fisher et al. (US PAT. 4,215,480).

Chung et al. teach all of the limitations as set forth above except a process of applying the lubricant by spraying or vacuum deposition. Fisher et al. teach a method of making a measuring instrument including a process of applying a lubricant between surfaces by either spraying or vacuum deposition to give good adhesion between the surfaces (col. 8, lines 63-67). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify a facilitating

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process of applying a lubricant to the swage ball of Chung et al. by applying the lubricant to the surfaces by either spraying or vacuum deposition as taught by Fisher et al. for the purpose of optimizing the adhesion between the surfaces.

Response to Arguments

8. Applicant's arguments filed 7/15/2003 have been fully considered but they are not persuasive. Applicant argues that the prior art of record fails to disclose the claimed invention such as providing a de-swaging process. Examiner traverses the argument that there is no such a limitation in the claim.

Applicant also argues that the prior art of record fails to disclose the claimed invention such as applying the lubricant at least outer surface of the swage boss. Examiner traverses the argument that it is unclear as to where the at least outer surface of the swage boss is indicated. When the lubricated swage ball is placed in the swage boss as described in Chung et al., the outer surface of the swage boss including a top portion of the swage boss is being lubricated by the lubricated swage ball.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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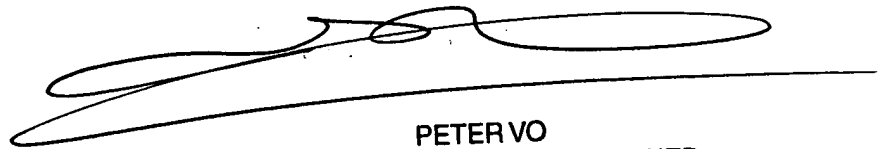
mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul D Kim whose telephone number is 703-308-8356. The examiner can normally be reached on Tuesday-Friday between 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5648.

pdk
September 29, 2003

A handwritten signature in black ink, appearing to read 'PETER VO', is written over a horizontal line.

PETER VO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700